

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/683,635	01/29/2002	Mathew Sommers	GLO 2 0079	4172	
27885	7590 04/13/2005		EXAMINER		
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR			LEE, GUIYOUNG		
	D, OH 44114	IH FLOOK	ART UNIT	PAPER NUMBER	
	•		2875	2875	
				DATE MAILED: 04/13/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Astina Commence	09/683,635	SOMMERS, MATHEW				
Office Action Summary	Examiner	Art Unit				
	Guiyoung Lee	2875				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 03 Ja	1) Responsive to communication(s) filed on 03 January 2005.					
2a)⊠ This action is FINAL. 2b)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>2,3,6,9-16 and 18-29</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>2,3,6,9-15 and 27-29</u> is/are allowed.						
6)⊠ Claim(s) <u>16,18-23,25 and 26</u> is/are rejected.	6)⊠ Claim(s) <u>16,18-23,25 and 26</u> is/are rejected.					
7)⊠ Claim(s) <u>24</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) X Notice of References Cited (PTO-892)	4) Interview Summary (					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date  6) Other:						
S. Patent and Trademark Office	· · · · · · · · · · · · · · · · · · ·					

Application/Control Number: 09/683,635 Page 2

Art Unit: 2875

#### **DETAILED ACTION**

### Prelim./Amdt.

- 1. Receipt is acknowledged of the amendment filed 01/03/2005.
- 2. Claims 2-3, 6, 9-16 and 18-29 are pending and claims 1, 4-5, 7-8 and 17 have been cancelled.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 16 and 18-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 4,950,958) in view of Bogdan (CA 2282819 A1).

Re claims 16 and 19-20: Lin discloses a lighting strip comprising a cord including a plurality of parallel conductive wires and an insulating coating (See 30-38 in Fig. 6); a plurality of light emitting elements (1) affixed to the cord and arranged to receive electrical power therefrom (See Fig. 7), and an at least partially light-transmissive tube (40) surrounding the plurality of light emitting elements and at least a portion of the cord. Lin does not disclose the light-transmissive tube includes an integral optical element. However, Bogdan teaches a light-transmissive tube (14 in Fig. 3) including an integral optical element (20) that distributes light emitted by a plurality of light emitting elements (12) along a lighting strip. Further, Bogdan teaches "the lens tube 14 optimizes and redirects the non-parallel light rays which are emitted by LED array by refracting portions of the light rays to various extents (page 10, lines 10-12)". It would have been obvious

Application/Control Number: 09/683,635 Page 3

Art Unit: 2875

to one having ordinary skill in the art at the time the invention was made to substitute Bogdan's light-transmissive tube including an integral optical element with Lin's light-transmissive tube in order to optimize and redirect the light rays from the light emitting element.

Re claim 18: Bogdan discloses a lens integrally formed with the tube (26 in Fig. 2B).

Re claims 21, 23 and 25: Bogdan teaches a method for manufacturing a lighting strip including a step of making the lens tube and an integral optical element by an extrusion molding (page 8, line 22).

Re claim 22: Bogdan teaches a color tinting of the tube (page 13, lines 22-24).

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin and Bogdan, as applied to claim 23 above, and further in view of Katogi et al. (US 6,659,622 B2).

Re claim 26: Lin does not disclose a step of crimping electrical leads of one of the light emitting devices to the electrical cable. However, crimping connection is a known process for connecting electrical leads to an electrical cable, and Katogi also discloses crimp contacts (19). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ crimping contacts as Katogi taught onto Lin's electrical leads because crimping provides fast and secure connections between an electrical lead and an electrical cable.

# Allowable Subject Matter

5. Claims 2-3, 6, 9-15 and 27-29 are allowed.

Art Unit: 2875

- 6. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: With regard to claims 11, 27 and 24, although the prior art of record, Lin and Bogdan, discloses a lighting strip having an electrical cable, a plurality of light emitting elements connected to the electrical cable and a light-transmissive tube surrounding the plurality of light emitting elements and the electrical cable, Lin and Bogdan fail to teach that a cylindrical lens is integrally formed on the light-transmissive tube by an extrusion process. Claims 2-3, 6, 9-10, 12-15 and 28-29 depend from claims 11 and 27. Therefore, Claims 2-3, 6, 9-15, 24 and 27-29 are patentable over the prior art of record.

### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2875

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guiyoung Lee whose telephone number is 571-272-2374. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LGY